

THYSANOPTERA OF SOUTHERN CALIFORNIA. II

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Euthrips minutus Moulton

This species has a wide distribution throughout California and quite naturally, therefore, it is by no means constant in certain respects. Since describing the variety *setosus* of this species in the previous number of Pom. Journ. Ent., I have received author's specimens of *E. minutus* from Mr. Moulton. After a careful comparison of these with the var. *setosus*, and, also, with closely related specimens taken at Elsinore, Cal., by C. F. Baker, I have come to the conclusion that neither of these latter are true varieties, but all merely forms of the same variable species. The original description was drawn from one specimen, and that, no doubt, is accountable for the fact that some important details were omitted from the description and accompanying illustrations; in the specimens sent me by Mr. Moulton I find the following variations from his figures: on the posterior margin of the prothorax there are three small spines, one larger than the other two between the second and third spines on each side (Contribution to our Knowledge of California Thysanoptera, Moulton, 1907, p. 56, Fig. 32); also the number of spines on anterior margin of fore-wing and on both veins is not constant, and sometimes not the same even on the two wings of one specimen. A comparison of the figure referred to above with Fig. 47A on p. 106, Pom. Journ. Ent. Vol. I., will show beyond a doubt that the extra prothoracic spine of var. *setosus* is nothing more than the longer of the three spines, not shown in Moulton's illustrations, merely more developed and longer, while the two spines beside it have remained minute in all specimens. Inasmuch as the species itself is variable in regard to the spines on the forewing, it is simply impossible to found a new variety on that basis.

Furthermore, the antennæ of the species are sometimes nearly three times as long as head, instead of twice; and the prolongation of the vertex, shown in var. *setosus*, is present also in the species. One point of variation, however, between the northern and southern forms is in the apparent absence of the orange crescents, bordering the ocelli, in the southern forms.

After such a comparison, the only reasonable thing to do is to let *E. minutus setosus* m. fall into synonymy as a good variety, and amend the description of the species as follows: Anterior margin of head almost straight, *with a small notched prolongation between insertion of antennae*; ocelli *sometimes* margined inwardly with large orange crescents; *antennae varying in length from two to three times as long as head*.

Posterior margin of prothorax with *four* spines on each side, *the third spine relatively shorter in some forms*. Wings reaching to tip of abdomen,

or more; anterior margin of forewing with from twenty-two to thirty-two spines, anterior vein with eighteen to twenty-six spines, and posterior vein with twelve to seventeen.

Average length from .83 mm. to 1.26 mm., occasionally more.

Food plant: Grass, several Compositæ, and others mentioned for var. *setosus*.

Locality: Berkeley, Cal., (Moulton), Elsinore, Cal., (C. F. Baker), and Claremont, Cal. (Crawford).

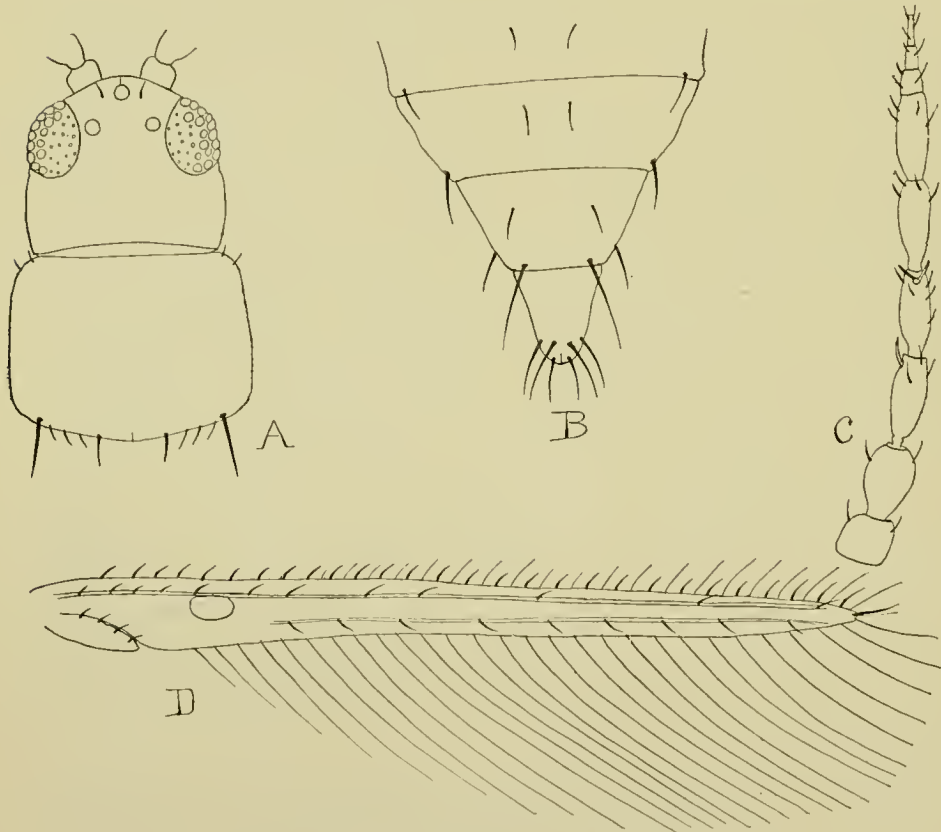


Figure 62. *Anaphothrips longipennis*

***Anaphothrips longipennis* n. sp.**

Average length about .96 mm.; general color, brownish yellow to yellowish white; all spines very light colored and indistinct.

Head (Fig. 62A) somewhat wider than long, subglobose, broadly rounded in front, with two small spines beside the anterior ocellus, and no more; cheeks full; occiput faintly reticulated. Eyes prominent, bulging, somewhat darker than head, lateral facets medium, dorsal facets very small; ocelli anterior, rather small, very pale and indistinct. Mouthcone moderately short,

reaching about three-fifths the length of prothorax, blunt at tip and distinctly tipped with black; maxillary palpi three-segmented. Antennæ (Fig. 62 C) apparently nine-segmented, about twice as long as head, slender, sparsely, briefly and indistinctly spinose; with a sense cone on segment III, and a bifurcate one on IV; II subglobose, III pedicellate, VI with a very distinct suture apically, which appears to be as true a joint as either of the joints of the style; style rather long and slender; basal segments very light, apical segments darker.

Prothorax (Fig. 62 A) subrectangular, about as long as head and three-fourths as long as broad; with one comparatively long transparent and indistinct spine at each posterior angle, several shorter ones on posterior margin, and two very small ones on each anterior angle. Legs medium in length, very sparsely spinose; tarsi unarmed. Wings (Fig. 62 D) long, slender, extending one-fourth the abdomen's length beyond tip of abdomen, very light brown, almost transparent, with a small clear area near base; veins rather prominent, posterior vein appearing close after basal clear spot; anterior vein with twelve spines, three on apical half; posterior vein with nine equidistant spines; anterior margin with a row of twenty-nine short spines; posterior marginal fringe moderately short, all spines and cilia very inconspicuous. Posterior wings shorter, entirely transparent, with a fringe on both sides.

Abdomen usually rather stout, fully half as broad as long, pointed at tip; occasionally the abdomen is longer and more slender, and only one-third as broad as long, and in such forms the wings only *slightly* over-reach the abdomen; broadest across segments five and six, tapering uniformly from six to ten; anal segment (Fig. 62 B) rounded at tip; abdominal spines few, and short; anal spines very short and almost transparent. This species apparently is not saltatory.

Measurements: Head, length .11 mm., width .13 mm.; prothorax, length .12 mm., width .16 mm.; pterothorax, width across mesocoxae .21 mm.; abdomen, length .42 mm., occasionally about .66 mm., width .24 mm.; total length about .96 mm. (.84—1.11). Antennæ: I, .022 mm.; II, .032 mm.; III, .040 mm.; IV, .041 mm.; V, .038 mm.; VI, .041 — .010 mm.; VII, .011 mm.; VIII, .014 mm.; total .25 mm.

Described from several females (two of which have the longer abdomen), taken from olive foliage infested with black scale (*Saissetia olcae*). It has not been determined yet whether or not this species has any definite relation to the scale insect; a few specimens have been found also on the foliage of common pine.

Locality: Claremont, Cal. (Crawford).

Although the current description of *Anaphothrips* precludes spines on posterior angles of prothorax, and the genus *Scirtothrips* Shull was erected for a certain species having such spines, nevertheless, I believe that without a doubt this species belongs in the genus *Anaphothrips*. The obvious and unmistakable similarity to *A. striatus* Osborn places it beyond doubt in the closest generic relationship with that species, at least, but whether a genus characterized by the apparent division of the sixth antennal segment should be erected might be a question of fair discussion; be that as it may, it is evident

that the presence or absence of spines on the prothorax is not in this case a true generic character, and if this is true, *Scirtothrips* becomes a very doubtful genus. *Scirtothrips* was erected with the following diagnostic characters separating it from *Anaphothrips*: "Head is shorter than broad and shorter than prothorax. One spine of moderate length is borne by each posterior angle of the prothorax. Species of this genus have the power of springing." If these three characters were constantly associated, a new genus erected on them would be unquestionable; but *A. longipennis* shows beyond a doubt that these characters are *not* constant; this species possesses the spines on the posterior angles or prothorax, but is nonsaltatory, while the head is broader than long and somewhat shorter than prothorax; consequently, the only diagnostic character left to *Scirtothrips* is the presence of the saltatory habit, and it is always more or less dangerous to erect a new genus on *one* character, especially a mere habitual character. Whether the power of springing, taken alone, can serve as a generic character, or not, we shall not discuss here.

*Ent. News XX, No. 5, p. 222.

***Phyllothrips fasciculata* Crawford**

(Pom. Journ. Ent. I, p. 105.)

Since the genus *Phyllothrips* is now in synonymy, this species should be known as *Liothrips fasciculata*; although *Lcptothis* was erected to replace *Phyllothrips*, still this species undoubtedly should be included in *Liothrips*.